Work Orden	er ID 10953 3 2:34:12 PM	39	14-041 09589	*109	9539*				,		Page 1
Item ID: Revision ID:	D3414-041			Accept	*N900	040	100)* s	Setup Star	1.71	S1*
Item Name:	Lug								Sto	^p *N	S2*
Start Date: Required Date:		tart Qty: 4.00 eq'd Qty: 4.00	*4* *4*		Cust Item l Customer:	D:					
Reference: Approvals:	Process Plan: QC:	MLJ	Date: /3~//- 2			ate:	_	F	Run Sta	" [\]	R1* R2*
Sequence ID/ Work Center II	Oi	peration escription		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revisio	n Nbr				·					
D3414	Rev C	!									
100				0.00		•					7
100 Waterjet FLOW CNC Waterj 304 //00"	jet	Memo 1-Cut as pe Dwg Rev:_ Prog Rev:_		0.00				13	0		Jm3-12-19
		2-Deburr if	necessary								
110	Q	C2- Inspect parts off r	machine FAI/FAIB	0.00							
*11 0 *	•	Memo		0.00				13	٥		Jm B-12-18

Memo

Quality Control

DQA:			Date:						_					7	TRAGE
QA Closed:			Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UI	PDATE &	\\/or	k Order un	udate only	7	AEROSPACE
QA Closeu.			Date.							<u> </u>	VVOI	K Order up	date only		
Work Orde	er:					DISPOSITION	ı			AGAINST I	DEPA	ARTMENT	PROCESS		
	•				_	Rework	П		Skid-tube	Crosstube			Water Jet		Engineering
Part i	lo.					Scrap			Machining	Small Fab	\exists	Pro	d. Eng. Coor.		Quality
	-					Use-as-is			moforming	Finishing		Rec/Stor	e/Packaging	1	Other
NCR I	۱o.					Suspected Unapproved			Large Fab	Composite			Supplier		
									,						
Root					Desci	ription of work order update	l	nitial	Act			Sign &			
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Descr	iption	_	Date	Verification	4	QC Inspector
Design	\Box											:			
Doc/Data	\dashv														
Equip/Tooling															
Handling/Pre														1	
Material							ļ							1	
Operator	Н						1								
Offset/Setup	Н														
Process							1								
Supplier															
Training					i									1	
Transport	\vdash														
Unapproved			<u> </u>		<u></u>		ΕΔI	HT CA	TEGORY	<u> </u>					····
Landi	nø (General	17	OLI CA	TEGORI -						
Land		Bending			Г	Bend	Г] Folio/I	Program	[\Box_{c}	outside Dim	ensions [\neg	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			-	ver/Under	⊢	_	Set-up
		Cracks				Broken/Damage/Defect		Hardwa	are	İ	_	art Incorre	<u> </u>	_	Femperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		4	tion Incomplete/Ur	ngualified	_	art Lost/Mi	├	_	Weld
ļ		Cuffs		•		Contamination		1 '	tions Incomplete/U	· ·	_	art Moved		٦؍	Wrong Stock Pulled
		Crushing			-	Countersink		4	gned/off center		P	ositioned V	Vrong		
	Г	Heat Trea	at			Cut Too Short		Mislab	~	ľ	_	ower Loss/		\neg	Other
		Inspectio		Tube		Drawing		Misrea		•					
]		Marks/Ch				Drill Holes		Off-set	:		_	·			
		Turning S				Finish		Out of	Calibration		_				
}	Г	Wave/Tw				Fit/Function		Out of	Sequence						

Work Ord November-21-1.				*109!	539*						Page 2	
Item ID: Revision ID:	D3414-041			Accept	*N 900	040°	100)* s	Setup Stai	1.7	S1*	
Item Name: Start Date: Required Date: Reference:	Lug 11/25/13 : 11/25/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item l Customer:	D:				IN	S2*	
Approvals:	Process Pla	in: _ ,	Date:	Tooling: SPC (Y/N):		ate:		I	Run Sta Sto	1/7	R1* R2*	
Sequence ID/ Work Center I 120 *120* QC Quality Control	D	Operation Description QC8- Inspect parts - sec	ond check	Set Up/ Run Hours 0.00 0.00 0.00 0.00	Tool ID		Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	
130 *120* Brake NC Brake NC		Memo 1-Deburr 2-Form usir	ng DT8254 as per Dwg D3	0.00 0.00 414		Da: 30 9-89	1	13		_	(3	112/1

0.00

1- Weld using location Jig DT9625 as per Dwg D3414 A/R S.S. welding rod Batch: 12 085 ff

140

140 Large Fab

Large Fab

(B) me 14-01-08

DQA:			Date:										TRAGE
QA Closed:		•	Date:			WORK ORDER NON-	-CC	NFO	RMANCE / UPDATE		ork Order up	odate only	AEROSPACE
Qr Closeu.			- Dute.			DISPOSITION			AGA		PARTMENT		
Work Orde	er:					DISPOSITION			,— <u>-</u> -	_	. A		
Part N	lo.					Rework Scrap			Machining Smal	stube	4	Water Jet d. Eng. Coor.	Engineering Quality
NCR 1	۱o. ِ					Use-as-is Suspected Unapproved		Therr	noforming Fini Large Fab Comp	shing oosite	Rec/Stor	e/Packaging Supplier	Other
Root					Desc	ription of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data													
Equip/Tooling													
Handling/Pre							ļ	,					
Material								•					
Operator													
Offset/Setup		,					1						
Process													
Supplier				,									
Training													
Transport													
Unapproved							1						
					•		FA	ULT CA	TEGORY				
Landi	ng (Gear				General		·			_		
		Bending				Bend		Folio/I	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect	Г	Hardwa	are		Part Incorre	ci 📗	Temperature/Cure
		Crimp/Kir	nk/Ripple	/Wave		Burrs		Inspect	tion Incomplete/Unqualifie	d 🗌	Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		Instruc	tions Incomplete/Unclear		Part Moved		Wrong Stock Pulled
		Crushing				Countersink		Misali	gned/off center		Positioned V	Vrong	
		Heat Trea	at			Cut Too Short		Mislab	eled		Power Loss/	Surge	Other
		Inspection	n Strip in	Tube		Drawing		Misrea	d		-		
		Marks/Ch	•			Drill Holes		Off-set					
	Г	Turning S				Finish		Out of	Calibration				
		Wave/Tw				Fit/Function		Out of	Sequence				

Work Order ID 109539

109539

Page 3

November-21-13 2:34:12 PM Accept Item ID: D3414-041 *N900040100* Setup Start **Revision ID:** Stop Item Name: Lug *4* 11/25/13 Start Otv: 4.00 **Start Date: Cust Item ID:** Required Date: 11/25/13 Reg'd Oty: 4.00 **Customer:** Reference: Run Process Plan: _____ Date: Tooling: Approvals: Date: Stop SPC (Y/N): Date: Date: QC: Reject Sequence ID/ Set Up/ Tool ID Tool # Plan Operation Accept Reject Insp. Qty **Qty** Work Center ID Description **Run Hours** Code Number Stamp 150 QC9- Inspect visual per QSI004- Fusion Welds 0.00 DAS *150* 14-01-09 0.00 OC Memo Quality Control QC5- Inspect part completeness to step on W/O 0.00 160 DAS *160* 14-01-09 0.00 OC Memo **Quality Control** 0.00 170

170 Powdercoat

Powder Coating

Memo

START TIME: **OVEN TEMPERATU** FINISH TIME:

0.00

13 \$ 14-1-15

DAS

DQA:			Date:										TRAG
QA Closed:		3	Date:			WORK ORDER NON-	-CC	ONFO	RMANCE / UPDATE	\٨/	ork Order up	odate only	AEROSPACE
QA Closed.			Date.				\neg				· · · · · · · · · · · · · · · · · · ·		1
Work Orde	er:					DISPOSITION			AGAIN	IST DE	PARTMENT	/PROCESS	
	-				_	Rework	1		Skid-tube Crosstu	be]	Water Jet	Engineering
Part N	lo.					Scrap			Machining Small F	ab	Pro	d. Eng. Coor.	Quality
	•					Use-as-is		Therr	moforming Finish		Rec/Sto	re/Packaging	Other
NCR N	۱o. <u>-</u>				_	Suspected Unapproved]		Large Fab Compos	ite	J	Supplier	
Root	\neg				Desci	iption of work order update	ı	nitial	Action		Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
Design													
Doc/Data			i										
Equip/Tooling	Ш		·										
Handling/Pre	Ш		1								i.		
Material	-								,				
Operator	\dashv		1										
Offset/Setup	\Box												
Process							1						
Supplier Training	H												
Transport	Н						1				1		
Unapproved			ļ										
-	<u></u>		1	I			FA	ULT CA	TEGORY		<u> </u>	•	
Landi	ng (Gear				General							
		Bending				Bend	Γ	Folio/	Program		Outside Dim	ensions	Pressure/Forced
		Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
		Cracks				Broken/Damage/Defect		Hardw	are		Part Incorre	cí _	Temperature/Cure
ļ		Crimp/Kii	nk/Ripple	/Wave		Burrs		Inspec	tion Incomplete/Unqualified		Part Lost/M	issing	Weld
		Cuffs				Contamination		Instruc	tions Incomplete/Unclear		Part Moved	L	Wrong Stock Pulled
		Crushing				Countersink		-1	gned/off center		Positioned V		
		Heat Trea	at			Cut Too Short		Mislab		L	Power Loss/	'Surge	Other
		Inspectio	-	Tube		Drawing	\vdash	Misrea			-		
		Marks/Ch				Drill Holes		Off-set					
		Turning S	-			Finish		-	Calibration				
		Wave/Tw	ist in Tub	oe		Fit/Function		Out of	Sequence				

Work Orden				*109	539*		Page 4
Item ID: Revision ID: Item Name: Start Date:	D3414-041 Lug 11/25/13	Start Qty: 4.00	*4*	Accept	*N90004010	Stop	*NS1* *NS2*
Required Date: Reference:	11/25/13	Req'd Qty: 4.00	*4*		Customer:		
Approvals:		lan:			Date:	Run Start Stop	*NR1* *NR2*
Sequence ID/ Work Center II 180 *1 A \(\) QC Quality Control 190 *1 \(\) Packaging Packaging	D	Operation Description QC3- Inspect Part Finish Memo Identify as per dwg & Ste		Set Up/ Run Hours 0.00 0.00	Tool ID Tool # Plan Code		Reject Insp. Number Stamp
200 *200* QC Quality Control		QC21- Final Inspection - Memo	- Work Order Release	0.00		W14-01-17	

DQA:			Date:						_				TRAGE
						WORK ORDER NON-	-CC	ONFO	RMANCE / UPDA				AEROSPACE
QA Closed:		v	Date:							wo	ork Order up	date only	
Work Orde	er:					DISPOSITION			A	GAINST DE	PARTMENT/	PROCESS	
	•				_	Rework			Skid-tube Cro	osstube		Water Jet	Engineering
Part N	lo.					Scrap			}	mall Fab	Prod	d. Eng. Coor.	Quality
	•				_	Use-as-is			Ŭ H	inishing		e/Packaging	Other
NCR N	Ю.		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		Suspected Unapproved			Large Fab Cor	mposite		Supplier	
Root				:	Desc	ription of work order update		nitial	Action	. **	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	ief Eng	Description	n	Date	Verification	QC Inspector
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Doc/Data													
Equip/Tooling				-									
Handling/Pre													
Material						·							
Operator													
Offset/Setup													
Process													
Supplier							l						
Training							l						
Transport					•								
Unapproved							<u> </u>						1
							FA	ULT CA	TEGORY				
Landi	ng (1			_	General		1 /-		_	1	. г	¬_ ,
		Bending				Bend	-	1	Program		Outside Dim	<u> </u>	Pressure/Forced
	_	Centre No	ot Concer	itric	\vdash	BOM/Route	-	Grain			Over/Under	<u> </u>	Set-up
	$\overline{}$	Cracks	-1./Di1-	// //	-	Broken/Damage/Defect		Hardwa			Part Incorred	⊢	Temperature/Cure
	-	Crimp/Kir	ак/кірріе	/wave	-	Burrs	_	('	ion Incomplete/Unquali		Part Lost/Mi	ssing	Weld
	<u> </u>	Crushing			-	Countarink	\vdash	4	tions Incomplete/Unclea		Part Moved	/rong	Wrong Stock Pulled
	\vdash	Crushing			\vdash	Countersink	 	•	gned/off center		Positioned W	_	Other
	\vdash	Heat Trea		Tubo	<u> </u>	Cut Too Short	-	Mislabe			Power Loss/S	ourge [_	Torrier
	<u> </u>	Inspectio	•	rube	-	Drawing Drill Holos	\vdash	Misrea					
		Marks/Ch			-	Drill Holes	\vdash	Off-set					
		Turning S			\vdash	Finish	\vdash	1	Calibration				
Į	l	Wave/Tw	ist in Tub	e e		Fit/Function	1	Jout of	Sequence				

November-21-13 2:34:12 PM

Work Order ID:

109539

Parent Item:

D3414-041

Parent Item Name:

Lug

Start Date: 11/25/13

Required Date: 11/25/13

Start Qty: 4.00

Required Qty: 4.00

Comi		4
Comi	псп	w.

IPP A05.09.13New issueKJ/JLM

Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S12GA 304/316 0.100" Sheet		Purchased	No			100	sf	134.6260	0.155	-0.62	ا		JmB-12-18
				Location		Loc Qty	<u>L</u> .	oc Code					
				MAT		0.1							
				1130	077	0.1							
				MAT019		134.526							
				1130	062	76.13							
				m12	6309	58.396			126	<u>309</u> .	•		
D3414-3 Lug		Manufactured	No			140	Each	52.0000		3)4	ml		14-01-0
				Location		Loc Qty	<u>L</u>	oc Code					
				WA001		52							
				100	822	2							
				1034		4							
				<u>/106</u> 6		40 6							

DQA:		 	Date:										TRACT
0461			Data			WORK ORDER NON	-CC	ONFO	RMANCE / UPD		ork Order up	data only	AEROSPACE
QA Closed:			Date:		1	<u> </u>					ork Order up	date only	
Work Orde	r:					DISPOSITION				AGAINST DI	EPARTMENT,	'PROCESS	
	-					Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering
Part N	lo.					Scrap			├ ──	Small Fab	Pro	d. Eng. Coor.	Quality
	-					Use-as-is]	Therr	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR N	۱٥.					Suspected Unapproved]		Large Fab C	Composite		Supplier	
Root	T I				Desc	l ription of work order update		nitial	Action	<u> </u>	Sign &		
Cause	l	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descript	ion	Date	Verification	QC Inspector
Design										·			
Doc/Data													
Equip/Tooling													
Handling/Pre							1		1				
Material													
Operator													
Offset/Setup													
Process													
Supplier													
Training							Ì						
Transport							ļ						
Unapproved			<u> </u>								_		
							FA	ULT CA	TEGORY				·
Landi	ng (Gear			_	General	_	,			_	 	¬
		Bending				Bend		1	Program	_	Outside Dim	ļ . 	Pressure/Forced
		Centre N	ot Concer	ntric	L	BOM/Route	\vdash	Grain		_	Over/Under	<u> </u>	Set-up
		Cracks			<u> </u>	Broken/Damage/Defect	<u> </u>	Hardwa		_	Part Incorre	<u> </u>	Temperature/Cure
	ldash	Crimp/Ki	nk/Ripple	:/Wave	\vdash	Burrs	\vdash	4	tion Incomplete/Unqu		Part Lost/Mi	ssing	Weld
	<u> </u>	Cuffs			<u> </u>	Contamination	_	4	tions Incomplete/Unc	lear	Part Moved		Wrong Stock Pulled
	_	Crushing				Countersink		-1	gned/off center	ļ	Positioned V	_	-1
	_	Heat Trea				Cut Too Short		Mislab			Power Loss/	Surge	Other
	$ldsymbol{f eta}$	Inspectio	-	Tube	<u> </u>	Drawing		Misrea					
	L	Marks/Cl				Drill Holes		Off-set			-	· · · · · · · · · · · · · · · · · · ·	
	$ldsymbol{ldsymbol{ldsymbol{eta}}}$	Turning S				Finish		4	Calibration				****
	1	Wave/Tv	vist in Tub	be		Fit/Function		Out of	Sequence				

DART AEROSPACE LTD	Work Order:	109539
Description: Lug Bracket	Part Number:	D3414-1
Inspection Dwg: D3414 Rev: C		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article X Prototype

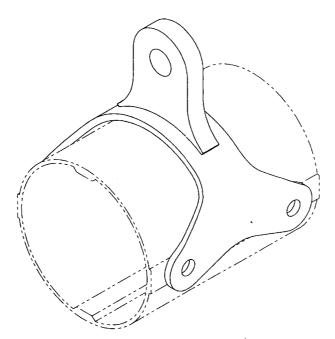
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.313	+0.006/-0.001	0,315	_		U	Jim si
1.19	+/-0.030	1.19"	_		V	
1.00	+/-0.030	1.005	-		V	
3.38	+/-0.030	3385	_		V	
5.350	+/-0.010	5,356			V	
6.23	+/-0.030	6.23~	_		V	
2.500	+/-0.010	2.504"	-		V	
0.37	+/-0.030	6.37"	-		V	
0.100	+/-0.010	0.102			v	
						1723

Measured by: Jm Audited by: 27 Prototype Approval: N/A

Date: (3.)3-18 Date: 13/12/19 Date: N/A

Rev	Date	Change	Revised by	Approved
Α	08.02.28	New Issue P/O D3414-041	KJ/DD	
В	09.05.27	Dimensions updated per Dwg Rev B	KJ (A	
С	09.10.16	Dwg Rev updated to Rev C	KJ X	<u> </u>

ITEM No.	QTY. -041	PART NUMBER	DESCRIPTION		
1	Х	D3414-041	LUG ASSEMBLY .		
2	1	D3414-1	LUG BRACKET		
3	1	D3414-3	LUG		



D3414-041 LUG ASSEMBLY

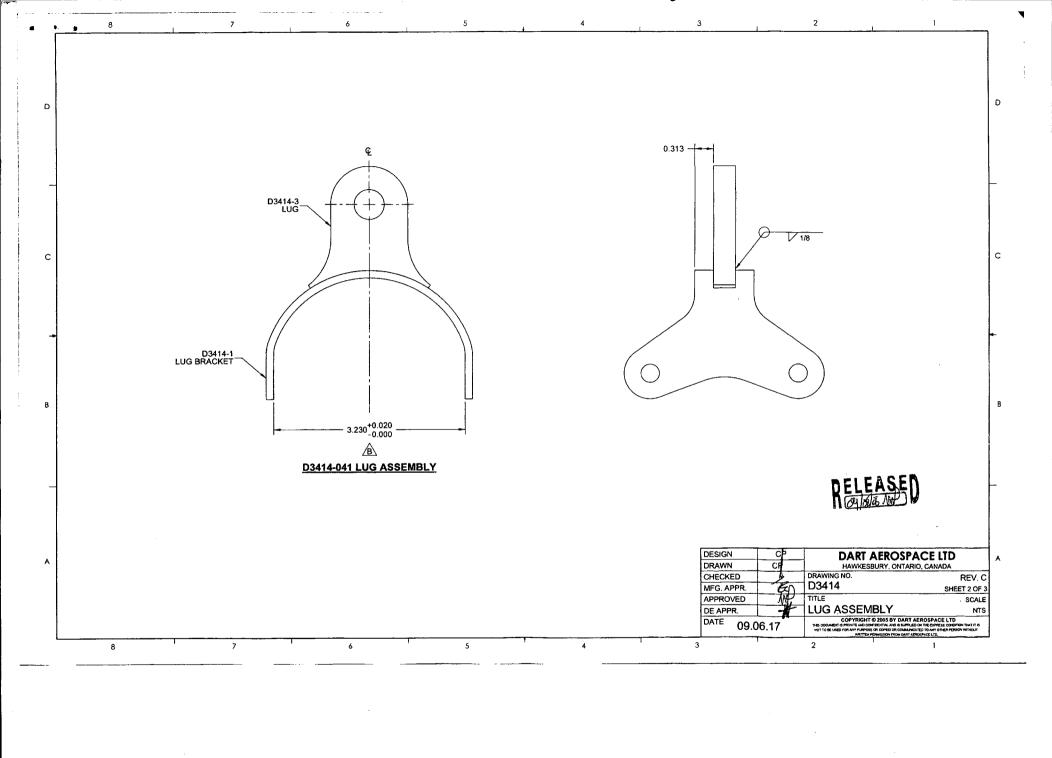
D

NOTES:
1) MATERIAL: N/A
2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3414-041" USING FINE POINT PERMANENT INK MARKER
7) WEIGHT: 0.52 lbs

109 539 MLJ 13-11-22

DESIGN CP		ď₽	DART AFROSPA	CEL	TD.
REV.	DESCRIPTION			BY	DATE
Α	NEW ISSUE			CP	05.03.16
В	DRAWING REDRAWN IN SOLIDWORKS WITH CURRENT STANDARDS AND TRANSFERED TO "B" SIZE BORDER. FLAT PATTERN FOR -1 INCREASED IN LENGTH TO PREVENT FOULING AT INSTL (SEE PAR198). FLAT SPOTS REMOVED FROM -1 (PART NOW "U" SHAPED) FOR EASE OF MANUFACTURE. B". 3 ADDED TOLERANCE TO 3.230 DIM C.2-3 1.72 DIM WAS 1.20.			AJS	08.09.23
С		SHARP EDGES 30 (ZN A7-3)	FOR -3 NOW 0.030-0.060 WAS	СР	09.06.17

DESIGN	L OP	J DART AEROSPACE LTD		
DRAWN	o₽	HAWKESBURY, ONTARIO, CANADA		
CHECKED		DRAWING NO.	REV. C	
MFG. APPR.	E	D3414	SHEET 1 OF 3	
APPROVED	West	TITLE	SCALE	
DE APPR.	- W	LUG ASSEMBLY	NTS	
DATE 09.0	06.17	COPYRIGHT @ 2005 BY DART AEROSPACE LTD THIS DODAMEN'S PREVATE AND CONFIDENTIA, AND IS SUPPLED ON THE EDITIESS CONFIDENTIAL THE NOT TO BE USED FOR ANY PURPOSE OR CONFIDENCIATOR TO ANY OTHER PERSON WITHOUT		



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